ORIGINAL (Red)

Witco

Witco Corporation

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30 August 1995 2061601

Mr. Eric Newman
Remedial Project Manager
United States Environmental Protection Agency
DE/MD Remedial Section (3HW42)
841 Chestnut Building
Philadelphia, PA 19107

Re: Response Action Plan

Halby Chemical Superfund Site

Wilmington, Delaware

Administrative Order for Removal Response Action

Response to EPA Comments on the Response Action Plan

Dear Mr. Newman:

Pursuant to paragraph 8.5 of the Unilateral Administrative Order (Order), the Respondent has incorporated the EPA Comments dated 8/18/95 on the Response Action Plan or herein provides comments why the EPA Comments were not included. For ease of reference, we have numbered the comments provided in the EPA letter, and retyped them herein.

Section 1.0 - Introduction

Comment 1:

Second paragraph, first sentence: replace "which will" with "to".

Response:

incorporated.

Comment 2:

Section 1.1 - Delete the second sentence. Operable units are not physical

features, nor are they necessarily static.

Response:

The purpose of this sentence is to identify Operable Unit 1 (OU-1) since it is discussed throughout the Remedial Action Plan (RAP). This sentence is not

meant to define OU-1. OU-1 is defined in the Consent Decree.

Comment 3:

This section fails to demonstrate that the Witco Corporation has an understanding of the Site, past or present (i.e., known disposal practices; types of hazardous substances and general locations already documented at the Site,

etc.).

Response:

As EPA well knows, Witco has been involved at this site for many years now and has a complete understanding of all aspects of the site, however, the purpose of this section was to provide a very brief historical site description update. The sitent description is presented in the Order. The Preliminary Site Assessment (PSA) described in Section 2.1.1 of the RAP and as identified on Page 7 of 45 of the RAP will include a complete description of past and present-disposal practices,

types of hazardous substances, etc.

Comment 4:

Section 1.2 - We do not understand the Project Description section as the narrative does not clearly encompass the scope of activities. Please see the Action Memorandum to get a full understanding of the scope. Items a-p identified in Section 2.0 are requirements of the Order. The development of the FFS is a requirement of the RD/RA Consent Decree. While it makes good sense to include the FFS in the RAP, including the schedule, it is not appropriate to identify it as stage two of the RAP. The OU-2 RI/FS is being performed by the U.S. EPA and should not be included in the RAP schedule. While the RAP does and should include a task to identify removal cleanup standards and a task to evaluate options to remedy the conditions, it will not be an RI/FS. Conditions found at the site should dictate if stages are necessary and appropriate.

Response:

The purpose of this section was to indicate that the Respondent intended to implement the order by addressing the most contaminated area first, i.e., the Site's drainage system and then the remainder of the Site. The scope of activities is discussed in Section 2.0 of the RAP and does include items a-p.

This section also identifies that there are other regulatory components such as the OU-1 Focused Feasibility Study and the OU-2 RI/FS that are on-going activities for the site. The Respondent understands that the Order and the corresponding Response Action are not the OU-2 Remedial Investigation/ Feasibility Study (RI/FS) or a part of the RI/FS.

It is impractical and inappropriate because of the 14 acre size of the site to perform all activities at once for the entire site. Based on the conditions found at the site in the area of the drainage system, the Respondent will perform investigations and remediation for this area ahead of other areas. The Order, although it does address the entire site, was issued primarily because of the conditions found in the drainage area. The Respondent will, as noted in the RAP, address the entire site.

Comment 5:

The RAP must provide for an expedited schedule for the entire project outlined in the Order.

Response:

The schedule included within the RAP has been revised to include an expedited schedule for the entire project outlined in the Order. Many portions of the schedule are tentative since at this time no one knows the amount of work that will be required at the site because the extent of contamination is unknown and the appropriate remedial measures for the site have not been determined. The Respondent has already in an expedited manner implemented site security measures, secured access agreements, established an office at the site, hired contractors including an analytical laboratory, investigated the possibility of other utilities on-site, initiated excavation along the water line, determined site zoning requirements, and performed many of the other PSA work scope items.

Section 2.0 - Stage Work Plan Activities

Comment 6:

Requirements of the Order also include: preventing the migration of hazardous substances; <u>implementing</u> the HASP; and, providing an <u>expeditious</u> schedule.

Response:

The Respondent understands that the requirements of the Order also include: preventing the migration of hazardous substances; implementing the HASP; and,

providing an expeditious schedule. The Respondent commits to perform these actions.

Comment 7:

Section 2.1 - A Sampling and Analyses Plan consists of a Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP). The FSP should be submitted with the revised RAP.

Response:

Incorporated.

Comment 8:

Section 2.1.1 - In the event that Witco has a problem securing access from one or more property owners, Witco will be expected to begin activities without delay on properties where access has been granted.

Response:

The Respondent has secured access from all property owners on site, as well as the railroad. No other access agreements are anticipated. Security measures, and investigative and sampling test pits have already been initiated.

Comment 9:

Please note that EPA has not performed any stabilization efforts to date so duplication of these activities should not be a concern. Only sampling of soils has been performed.

Response:

EPA has performed treatability stabilization efforts and have documented them in a summary prepared by Earth Tech Remediation Services forward by Mike Towle. The Respondent will use this information in developing further stabilization procedures. The Respondent has initiated detailed studies of possible stabilization methods. A manufacturer of carbon disulfide has been contacted. A task force consisting of Witco, Langan, Dr. Paul Fahrenthold and an oversight contractor ERM has been formed to develop possible treatability/ stabilization efforts. Treatment will be studied to the extent that site conditions require.

Comment 10:

The review of key site documents should already have been completed (note that final RI/FS report for OU-2 is not expected until 1995). Witco was notified of this pending action on or about June 20, 1995. Any review of peripheral documents, interviews, zoning maps, manufacturers recommendations, etc., can and must be accomplished concurrent with RAP implementation. Field work must not be delayed until Witco's Preliminary Site Assessment (PSA) is completed. The PSA is a good idea but not a requirement of the UAO. Known locations of high contamination must be addressed in an expedited manner. Please note that EPA has already completed enough sample analyses to have determined that an imminent and substantial threat to human health and the environment is posed by contaminants at the site.

Response:

The schedule has been revised to include peripheral document review, etc. concurrently with RAP implementation. Field work along the water line has been implemented with EPA's concurrence. The PSA work is expected to be completed prior to EPA's approval of the RAP. The schedule for the PSA has been revised.

One purpose of the PSA is to make sure that "all" utilities at the site have been identified. This has been completed. We did not want to excavate test pits until all site utilities were identified and field located.

The schedule has been revised to incorporate EPA's comment concerning addressing highly contaminated areas in an expedited manner.

The Respondent has previously indicated that they do not concur with EPA's determination that an imminent and substantial threat to human health and the environment is posed by contaminants at the Site. Nevertheless, the Respondent has implemented Site Security measures consisting of a fence, and notified the water utility of possible worker exposure along the water line.

Comment 11:

Please keep Respondent's interpretation of notices of violation and other regulatory action out of documents to be submitted to EPA. Just the facts will be fine.

Response:

Understood.

Comment 12:

Section 2.1.2 - One SAP for the site should be sufficient. Note that stages II and III are not requirements of the UAO. If some sampling may assist the development of the FFS, please include it in the SAP.

Response:

Only one SAP will be provided. However, the SAP will be revised as additional data becomes available.

Comment 13:

Section 2.1.3 - Selection of subcontractors for known tasks should be advanced by 6-7 weeks from the proposed schedule in Appendix B.

Response:

Incorporated.

Comment 14:

Section 2.2.2 - Should include all areas of potential exposure.

Response:

Temporary fencing has been constructed around the drainage ditch and the area immediately west of the ditch where all known potential exposure exists as agreed upon by EPA on August 18, 1995.

Comment 15:

Section 2.2.7 - The draft RAP does not meet the UAO requirement of providing an expedited schedule.

Response:

The schedule has been revised in response to this comment.

Comment 16:

Section 2.3 - We agree that a qualitative investigation of the extent of soil and sludge contamination around the water main is appropriate. Witco may choose a different course of action if 200 feet of pipe is located in contaminated soils as opposed to 1200 feet. However, we believe that field screening (i.e., PID, CGI, Draeger tubes, etc.) should be sufficient to determine whether area-specific isolation activities are warranted. It is unnecessary to first perform test trenches

and to later collect samples in accordance with the Field Sampling Plan (FSP). Instead, the FSP should describe the test pit strategy (i.e., depth and interval) and call for both field screening and collection of the samples while the pit is open. Flexibility should also be granted to the sampling team to collect samples based on visual observations. Later, after the samples have been collected, a map should be generated to identify the locations of samples, whether they be samples screened in the field or actually sent to the laboratory.

Response:

Six test pits and analytical sampling of contaminated soil were performed at the site along the water main on August 28,1995. Additional test pit excavation is anticipated in both a north and south direction along the water main. The details of additional work will be provided as soon as results of the six test pits have been evaluated. A map where test pit excavations were performed and samples obtained along with analytical results will be prepared.

Comment 17:

Again, the schedule needs to be expedited. Test pits along the water main should be initiated within 10 days of the RAP approval. These field investigations should be completed within 2-3 weeks. Any samples sent to the laboratory for analyses should be contracted for 7 day turn-around.

Response:

Refer to the response to Comments 15 and 16 above.

Comment 18:

This RAP does not discuss measures to remove threats posed by hazardous substances in the immediate vicinity of the water main. RAP must include an unqualified commitment to provide for clean access to service the water main. RAP must identify the width and depth of the clean corridor it will guarantee the water company (i.e., 8 feet on either side and 3 feet below?). RAP should include options for water main isolation. For example (and for discussion purposes only), if up to 350 feet of pipe is compromised Witco will excavate and backfill, if greater than 350 is compromised Witco will provide for an alternate water main and then evaluate the excavation option in context with the ditch and sump area soils. RAP schedule should provide for initiation of field work necessary to isolate the water main within something on the order of 30 days of completing test trenches.

Response:

Section 8.3e of the Order requires the Respondent to "Isolate water main and other utilities and services from hazardous substances and provide uncontaminated access to maintain these systems". The Respondent has indicated they will comply with the Order to the extent the Order is consistent with the NCP. It is not practical or possible to isolate the water main within the 30 days suggested by EPA. This area of the water main has been fenced to provide security. The water company has been notified of potential concerns and been provided with emergency phone numbers if an emergency condition is identified.

Comment 19:

Please note that the UAO mandates isolation of the water main, not studying the water main. The RAP includes a study, but no commitment to isolate.

Response:

Refer to the response to Comment 18 above.

Comment 20:

Unless extraordinary measures are required, activities along the water line (delineation, option evaluation, and implementation) should be completed before

the end of the calendar year.

Response:

Understood.

Comment 21:

Section 2.3.1 - Please note that the OVA does not pick up CS₂. Use a PID and determine response factor for model used. A Combustible Gas Indicator may be

helpful for safety reasons.

Response:

A PID and draeger tubes will be used for CS₂ safety determinations.

Comment 22:

Section 2.3.1 and 2.3.2 should be combined. With the extensive suite of contaminants already identified on the Halby Site, most laboratory analysis should include, but not be limited to, TAL, TCL, thiocyanate, and hazardous characteristics including TCLP. TCLP will be valuable for disposal decision

making.

Response:

Incorporated but with the understanding that the list may be revised.

Comment 23:

Note that there is probably already enough known of the nature of the black sludge/soil for Witco to design a plan for treatability studies. It would be cost-effective to collect samples for treatability studies during initial field investigation for the ditch and sump areas. Witco should assume EPA's soil analyses are correct. This would allow Witco to design the treatability studies now and confirm EPA's analyses with additional sampling.

Response:

The Respondent assumes EPA's soil analyses are correct. There is no universally understood acceptable means for treating CS₂ contaminated soils. The Respondent has formed a task force and is investigating potential treatability technologies. It is not practical or possible to perform treatability studies at this time. As information becomes available we will provide it to EPA. The Respondent has revised the schedule to expedite this work. The Respondent notes that EPA's studies were not performed on the most contaminated or representative levels of contamination since the black material was not totally indicative of contamination as EPA believes. The Respondent intends to perform treatability studies on representative samples. Furthermore, before treatability studies are performed, it is essential that the quantities, concentrations, and material types need to be defined.

Comment 24:

For delineation purposes, perhaps less stringent QA/QC could be used. More stringent QA/QC practices are required to confirm cleanup actions were effective.

Response:

Comment noted.

Comment 25:

Sections 2.4 and 2.5 should be consolidated. Many of the same comments on Section 2.3 also apply here. Please submit the FSP along with the revised RAP.

Response:

Incorporated.

Comment 26:

Section 2.4.1 - Review of historical data should be completed by now. Use PID

rather than OVA.

Response:

Refer to the response to Comments 10 and 21 above.

Comment 27:

Section 2.5 - The area of black soils in the sump area is not limited to being

beneath the concrete pad. Note that there are 3 concrete pads in the sump

areas.

Response:

Incorporated.

Comment 28:

Section 2.5.1 - Again, samples should be collected when test pits are open. If area of contamination is too large for Witco to utilize test pits, boreholes should

be used. If boreholes are used, samples should be collected from depths to be

determined by field team (unless depth intervals are very small).

Response:

Incorporated.

Comment 29:

Section 2.8 - Evaluation of options task should begin right away based on

existing data. New data should be used to confirm the government's analyses

and better delineate volumes. Section 2.10.1 seems to be redundant.

Response:

Incorporated.

Comment 30:

Section 2.8.1 - Witco may be able to begin designing treatability study now

based on existing data. Concentrate on the sludge which has the highest

concentrations. In addition, treatability study duration is too long.

Response:

Refer to the response to Comment 23 above.

Comment 31:

Section 2.9 - Surface water <u>does</u> contribute to migration of contaminants. RAP needs an action item addressing site stabilization. Need a short-term storm/surface water control action which will be modified upon implementation of removal/remedial action. RAP needs to address isolation of ditch and lagoon

from river (i.e., surface water exists near I-495).

Response:

incorporated.

Comment 32:

Section 2.10 - Again, the risk assessment and remedial options evaluation should be moved way up. Witco can use a great deal of the contaminant specific toxicity data already researched and available in the draft OU-2 risk assessment. Exposure scenarios can be developed now. The only thing that is required are

the data. Again, use existing data to get started.

Response:

Incorporated.

Comment 33: Section 2.10.1 - We are not sure where the July 9,1995 date comes from.

Response: The July 9, 1995 date is the date that the Respondent was provided data and

sketches concerning the EPA response action.

Comment 34: Section 2.10.2 - Note: The ecological risk assessment in the draft RI was a first

draft and will be undergoing major rewrite.

Response: Understood.

Section 6.0 - Project Organization and Responsibility

Comment 35: Section 6.2 - Project Manager is undefined.

Response: Incorporated.

Appendix A - Site Specific Health and Safety Plan

Comment 36: Section 1.1, second paragraph, last sentence - There should be one site-wide

HASP. Subcontractors can provide an amendment to the site-wide HASP), upon

the Health and Safety Officer's approval.

Section 5.1, third paragraph - A back-up RAM or Miniram should be on site.

No engineering controls discussed in this section.

Section 5.2 - Level C protection should only be used if Witco can provide a

cartridge for particulates (HEPA) and CS2.

Section 6.1 - Note that vinyl and neoprene are not resistant to CS₂.

Section 6.2 - HEPA cartridge?

Section 7.2 - Level C?

Section 7.3, last sentence - Upgrade to level C or B.

Response: Incorporated.

If you have any questions, please give me a call.

Very truly yours,

Rajnikant Vyas
Project Coordinator
Witco Corporation